## REMARKS

Claims 1, 4-6, 9, 10, 12, 16, 19-21 and 24-30 were rejected under 35 U.S.C. § 102(e) as being anticipated by Riley. This rejection is traversed for the following reasons.

Claim 1 recites two different types of output parameters, namely primary output parameters and secondary output parameters. If a primary output parameter is outside of a selected primary output parameter value range, the adaptation process is initiated to update the system model. If a secondary output parameter is outside of a selected secondary output parameter value range, a process adjustment is suggested to an operator without initiating said adaptation process. Thus, primary output parameters can cause alteration of the system model whereas secondary output parameters will not.

Riley fails to teach or suggest using two types of output parameters, one of which can initiate tuning of a control model while another does not. Riley refers to monitoring sensor data 115 from the rapid thermal processing (RTP) step through monitoring step 110. Riley also discusses measuring workpiece parameter characteristics of the RTP tool as shown in step 1520 of Figure 15 and discussed in paragraphs [0095] and [0096]. Again, Riley does not characterize parameters as either primary or secondary and performing different actions depending on the category of the parameter. Thus, Riley fails to teach or suggest the features of claim 1.

In the final rejection, the Examiner states that a first output parameter is used to tune the model as described in paragraph [0095] and Figure 15. The Examiner cites to paragraph [0044] as describing a second output parameter that is not used for tuning, but this paragraph clearly states that the sensor data is used for PID tuning which is the same process described with reference to Figure 15. Thus, these sections of Riley fail to teach two types of output parameters, one of which can initiate tuning of a control model while another does not.

For the above reasons, claim 1 is patentable over Riley. Claims 4-6, 9, 10, 12 depend from claim 1 and are patentable over Riley for at least the reasons advanced with respect to claim 1. Claims 16, 19-21 and 24-30 include features similar to those

discussed above with reference to claim 1 and are patentable over Riley for at least the reasons advanced with respect to claim 1.

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Claims 11, 13 and 14 were rejected under 35 U.S.C. § 103 as being unpatentable over Riley in view of Official Notice. The Examiner relied on Official Notice for various process control report contents. Even if such items are well known aspects of process control reports, such elements do not cure the deficiencies of Riley discussed above with respect to claims 1 and 16. Thus, claims 11, 13 and 14 are patentable over Riley in view of Official Notice for at least the reasons advanced with respect to claims 1 and 16.

In view of the foregoing remarks and amendments, Applicants submit that the above-identified application is now in condition for allowance. Early notification to this effect is respectfully requested.

If there are any charges with respect to this response or otherwise, please charge them to Deposit Account 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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